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(54) Tin oxide gas sensors

(57) Tin oxide sensors are disclosed having a resistivity that at a measuring temperature increases with concentration of at least one gas to be measured, the sensors are made by calcining the tin oxide in air at a temperature in excess of 1400°C, or otherwise treating the tin oxide so that it has a state of physical aggregation consistent with being formed in such manner. At a second measuring temperature the resistivity of the sensor to said one gas decreases with increasing gas concentration. The resistivity of the sensor is dependent on the concentration of several gases, the dependence at differing measuring temperatures being such that by measuring the resistivity of the sensor at several different measuring temperatures the composition of a gas to which the sensor is exposed may be calculated. An array of such tin oxide gas sensors may be mounted on a single substrate having heater means to maintain the sensors at differing temperatures. Such an array may also include an antimony bearing sensor as disclosed or other tin oxide sensors.

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EUROPEAN SEARCH REPORT

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Place of search	Date of completion of the search	Examiner
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